/484/

However, these awls are too abundant in each village for their use to be only sacred. It is probable that the Chiriguano use them as a simple tool for solely secular purposes.

At Tilcara, Debenedetti (2, Fig. 176, p. 232) discovered specimens made of deerhorn identical with our Chiriguano examples.

8. I have in my collections seeds whose virtues are multiple: they are an excellent remedy for skin eruptions, ulcers, and toothaches.

9. For stomach-ache the Chiriguano recommend the absorption of particles of wood (mboipinda).

10. Certain seeds (of a graminaceous plant?) when crushed give a paste or powder with which they treat animals whose sores are attacked by worms.

11. When cows' hooves tend to work loose, they bathe them with fragments of limestone (itakwi).

12. Fat extracted from a cow's foot is an effective ointment for cases of rheumatism.

13. The beak of the toucan is said to enjoy great medicinal properties. They grate it and drink in water the powder which comes from it (Campana, 111).

Stitches in the side and dysentery are treated with a piece of armadillo shell burned, ground, and dissolved in water, which the patient drinks.

In the Diccionario Chiriguano-Español y Español-Chiriguano etc. (passim) and Nino's book (pp. 288-290) is found many a very interesting piece of information on the pharmacopoeia of the Chiriguano. I shall summarize them in order to complete my own observations.

1. The oil which floats on kĩwi, when it is done, is a good remedy for headaches.

2. Salt, ground and drunk mixed with the urine of a small child, quiets stomach pains.

3. Rheumatism is doctored by applying on the ailing part a branch of ulala (Rankawina) from which the thorns have been removed and which has been heated.

/484 cont./

4. To stop dysentery, one must drink a decoction made of corn and watermelon seeds ground together.

5. Stitches in the side are treated by drinking a fragment of armadillo shell ground up and by rubbing the ailing place with a portion of this same calabash heated.

6. Tumors and swellings of the throat or knee are made to disappear by applying on the sore region the leaves of a shrub called urukuna, heated in a pot. Another herb (yundurimbiu) has the same virtue.

/485/ Urukuna leaves put in compresses on the skull dissipate headaches, protect one from congestion, and cure erysipelas. The leaves of yandipa (hediondilla) have all the virtues of urukuna.

7. Hemorrhages are stopped by means of latex or the roasted leaf of the liana supuapempe.

8. Kaa-upaya is an efficacious herb in cases of stomach ailments; and soto root cures pains in the feet (rheumatism?).

9. Guaya is a liana which cures any swelling in the side.

10. Goiter, rare among the Indians, is attributed by them to the sun. They treat it with tutía, a yellow fruit which reminds one of an apple, or by putting around the neck compresses of the blood of the gallinazo, carancho, or bandurria, kinds of vultures.

11. Ophthalmia or conjunctivitis is doctored with drops extracted from the bark of the algarrobillo or with the glue taken from the bud of the membiría plant. The leaves of yandi-wope are excellent for cases of ophthalmia.

12. A variety of caraguatá makes diarrhea stop.

13. The flower kaa-ro (bitter herb) cures skin eruptions and is as good for malaria.

14. The herb inái (tooth of water) is a remedy against whooping cough, which can also be treated with an infusion made of boiled or roasted wasps and drunk warm.

15. Tingi bark attached around the belly is excellent for fighting dropsy, as are the leaves of the aturu (palo de india), a tree reminiscent of laurel, or the herb kaa-paye, taken as an infusion.

164 /485 cont./

757 16. Gonorrhea is treated with the boiled root of the
824 mistol and tapir fat.

[237] 17. Earaches pass away if drops of chicken, beetle, and cicada fat are poured into the auditory canal.

18. The root of chirimoya del monte (aratibu) is a good antidote if one feels poisoned.

752 19. Snake bites lose their seriousness if one applies some
824 of the herb uruuru, guaje, tobacco, or nicotine on the wound.
The sap of the liana isipo-poro-mboyi, although poisonous, nonetheless constitutes an excellent antidote for the same cases.

752 20. By putting melted wax on the wound, you do not risk
237 dying when a mad dog has bitten you.

21. Wounds produced by a sharp instrument heal if burned chicken feathers are spread on them.

757 22. It suffices for a woman to drink the powder of a shell in water to put her fallen uterus back in place.

/486/

757 23. The red leaves of the añankamisa, iwira-ro (quebracho
824 cacha) bark, the woody plant toba-pitše, taken as infusions, are as many remedies for fever.

[752] 24. Compresses of kaa-ruruntirái make abscesses burst.

25. In case of constipation it is good to drink the latex of the kaa-si (cardencha, lechetresna).

752 26. After any serious fall one must drink water in which
757 one has made an infusion of a sort of vervain (kaimberai)
824 pounded beforehand. The consequences of the shock will not be felt if one applies on the sore regions poultices made with this same plant carefully ground.

27. Recommended for spreading on sprains are cara guatá leaves or a thick glue obtained by boiling the bark of iwira-pitiyu-wasu. This substance is equally good for fractures.

757 28. The Chiriguano chew the bark of iwira-pitiyu-wasu to make
824 their violent toothaches stop and to make their teeth more solid.

29. A cataract is doctored in the following way: One boils kuruwa leaves and bathes the patient's head with this infusion.
[237] Then one takes the gall from the dorado fish with pincers or

/42 cont./

*136 We can count among the amphibians the "Boicururu," or snake toad, which is nothing but the water tarantula, but it is very poisonous here; it is found near lakes in the swamps. Frogs are found in small numbers in the center of the region; [262] they abound where there is water on the banks of rivers; only the Toba and other barbarians eat them; the Chiriguano do not. There is an infinity of "Cururu" toads in terms of size, color, and song, one being distinguished among all of them, the one that the whites call "Rococo" and that is heard continually and loudly at a distance of one kilometer at night in rainy weather and where there is water.

*136 The toad is medicinal; one or two large ones are gently *825 caught alive and, one after the other, applied /43/ to parts [257] of the body affected by erysipelas, which is cured very [164] efficaceously, with the animal being left dead, doubtless because with its cold belly it absorbs all the heat which the sick person has in the said painful parts; more than once I have seen erysipelas cured in this way. In rainy weather there are so many of them that it is impossible to sleep near the place where they gather to sing their discordant tattoo; at the end of a heavy shower is when the noise of the toads is most unbearable.

*136 Fish abound in the large rivers, where there are shad, bagre, and dorado; the latter reach a length of two meters, as I have seen, and are very palatable and drip blood like cow's meat. Then in the same rivers, streams, and permanent lakes, there is an infinity of small "pira" fish, which are good to the taste, and finally there is no lack of eels, "Chorinchi," 43 or the useful leeches, "Evoipe." Indians who live on the banks of rivers of great volume trade in fish; to be sure, they plant fields, but generally they do not harvest because of the lack of rain, but obtain maize in exchange for fish; dried shad tastes like cod and is worth 10 and 20 centavos.

*136 Insects are innumerable, but not as abundant and varied in their form, size, and color as they are in the region of the Beni, the Mojo, and others; they are a hundred times more numerous than all the quadrupeds and birds together; there are bothersome ones, like mosquitoes and zancudos /long-beaked mosquito/, and there are poisonous ones, which, however, rarely cause death.

/45 cont./

*136 mouth. and then it goes to another place to repeat the operation. The eggs remain in the ground one month /46/ so that the larvae may hatch; these take three months to reach the state when they can fly. Red locusts have no fixed direction, but fly and stop in the hills and rarely come down to the pampas. Only if the pampas are very extensive will they spend the night there, but always in trees or thickets. Then
• [164] the Chiriguano gets up very early and puts in provisions for many days, and dysentery immediately appears in the town, carrying many to the grave.

Niguas are abundant where there are pigs and dogs, which they bother constantly. The nigua is a small flea in form and color, but not in its effects. It gets into the skin, causing a slight smarting. It is easy to get it out if its presence is soon noticed, but if it manages to establish its dwelling there and to make a nest, which consists of a small ball of skin, it is difficult to get it out. The nigua causes swelling and discomfort and makes walking impossible when it establishes its domain in one's feet. So that this may not happen, one first raises the skin around the ball with a needle, trying to get it out whole; ashes, especially cigar ashes, are deposited in the cavity which remains, and all danger of becoming immobilized for several days then disappears.

The guanaco is similar to the louse, but larger, and there
*[825] are some of every size. In Chiriguano they are called "Guanaco." These insects are also slightly buried in the ground, and they can easily bite one who goes barefoot or in sandals. They are abundant from Yvu to far beyond Santa
[164] Cruz de la Sierra. Their bite is not poisonous, but some of them do cause pimples or swellings all over the body, and in others the swelling is in the most immediately affected parts. The first of these effects was caused in a companion of mine, and he was later cured with five drops of ammonia in water; I had the second effect. It was during a trip, and since I had no ammonia, I cured myself of the swelling, which bothered me all day, with tender plantain leaves and melted grease, which an old woman in Guariri put on me. I spent the night there and woke up with no symptoms and no pain. The Indians chew tobacco and cure themselves easily.

/149 cont./

755 This done, they return to the town with an air of triumph
756 and pass through all of it, raining blows with their clubs on the
731 corners of the plaza and the houses of the most notable persons, and, the performance ended, he directs his discourse to those who surround him and the others who have come out of their houses. He tells them that they must not be afraid and that they should have confidence in him, for the illness over which he is the master has been dispelled.

He then takes a rest from his labors for several days, takes his leave of the cacique and the principal men, blessed by the frightened inhabitants, and returns to his town. Anyone can understand that, if there is no epidemic, it is a coincidence which will give considerable renown to the rascally imposter, and, if there is one, the blame falls on the townspeople or on some other /150/ bad sorcerer. Then he returns and becomes the healer for all of them. In smallpox epidemics the sorcerer is always one who has had it and who as a sad sign thereof has his face and his nose covered with pox.

755 In the first months after I arrived at the Santa Rosa Mission,
756 an epidemic began to break out; without my realizing what was
731 happening, exorcisms against the smallpox were being carried
● 164 out by the sorcerer Biringa, but as this disease had thoroughly invaded the town by the end of the year, he returned and paid well for his deceits; his threats that he would make the 256 male students of the school perish were of no avail since both they and the female students became sick, but only one of the boys and seven of the girls died (1).

(1) The girls of the Santa Rosa school numbered 735 in the year of the smallpox; those who were dangerously sick received the viaticum before they were taken to the lazaretto. Those about to die even received Extreme Unction in the lazaretto. In January of 1904 there were more than 500 persons in the latter.

/150 cont./

756 789 731 824 [197] Even for rain the sorcerers perform their incantations with their maize-husk cigar, making a turn in the planted fields. but if the drought is general, the incantations are public performed in the town in front of the house of the principal cacique. One of these was performed in the early days of the above-mentioned mission. The missionary had admonished them to stop it, but when they answered insolently, he formed or organized a commission with shotguns and old rifles. The three or four sorcerers fled, but one of them fell into the hands of the commission, was punished for his insolence, and in a few minutes a torrential shower refreshed the entire territory of the mission.

756 755 In concrete cases, when the sorcerer is required by a particular family, he establishes himself in the house of the sick man; he asks him a thousand questions regarding the sickness, the houses that he has frequented, the friends with whom he has drunk, the companions with whom he has played, and the things that he has earned. Then he lights his maize-husk cigar and smokes, blowing the smoke over the body of the patient, especially the affected part.

Then, depending on the greater or lesser seriousness of the illness, depending on the nature of the disease, whether it requires blows or jolting, which is the most likely, he delivers them so atrociously that they are likely to end the patient's life, and if not he is content with rubbing the affected part hard /151/ and sucking it with his mouth, extracting from the patient's body the worms which the rascal has hidden in his mouth (1).

• [164]

1. In many cases worms can be found in the bodies of these Indians between the flesh and the skin. I myself, with the use of fenolina, have made worms as big as chickpeas come out of their bodies, without their having had any wound at all.

/212 cont./

734 603 824 853 very easily manages to make the milk come down. She grinds watermelon seed or sarsaparilla root, Isipocagua, and washes herself repeatedly, squeezing herself over or above her breasts, and makes the famished child suck continuously for several days, and in a short time she achieves the desired result. Sometimes even young women lose their milk. They then look for the root and juice of the sámolo, or cipoi, wash the breasts with this juice, and succeed in nursing their children again (2).

2. In the confirmation administered by the Bishop in October, 1909, in Ivu Mission, an old woman of some 60 years of age presented her granddaughter, whom she had nursed. She is still alive, and so is the twin granddaughter, although not very strong.

Joy and Grief

855 For the Chiriguano race their joy at the birth of a male child is the same as at that of a female child, because if the former helps his father in field chores and in hunting and fighting, the latter helps her mother in household chores, and the father as much as the grandfather very much like to eat meal which has been ground by the hands /213/ of their daughter 765 or granddaughter. If either one dies, the grief that the old 855 people feel is very heavy. I witnessed many times a mother's agonies of grief over the death of her son and the profound feeling of the father over the irreparable loss of his idolized daughter.

799 758 164 What I am going to relate will better convince my readers. In the month of July in the year 1909, a rabid dog at the girls' school of the San Buenaventura de Ivu Mission bit Cecilia Yaguándai slightly and Ana Yarandui and Delina Aragúndai more severely. The two latter, younger than the

/213 cont./

797 758 •164 first, came to me to be treated for their wounds, to which I applied cotton soaked with ammonia, of which I also made them drink five drops. The two went through a high fever for four days, but they are alive. Cecilia did not consider her bite very important and did not come to me; I did not know that she had been bitten. She did not have a high fever either, because in fact scarcely any blood came out, according to what her companions say.

The month of January came, just six months after June, and the little girls who had been treated with ammonia again had the same degree of fever and recovered. The other girl began to be afraid of water and to be laughed at by her companions for this fear, so much so that she was the object of foolish tricks. She went down to the town, she wanted to drink water, was unable to, and she told her parents. At once she said that she had pain in her wrist, in her little breast, and in her shoulder, and nothing could be done to treat her; the sickness got worse and she received the last rites. The night before she died she tried to run out of the house; she howled without rest and tried to hit and bite her mother. In all, she had true hydrophobia, which carried her to the grave in three days (1).

1. The child Cecilia was bitten by the rabid dog right on her wrist, which is where the first pain began six months later. When I blessed her with holy water, she was afraid and shrank away.

Until she was buried, I did not know what had happened in the month of July, but when I saw such a similarity to rabies, I inquired and it turned out to be this which had 753 caused her death. Her parents, since they could not be 754 persuaded that the bite could produce an effect after so long a time, attributed her violent death to sorcery, stating that this must have been done by a young man who a few days earlier

/252 cont./

262 As very savory food there are also cicadas, ants, lizards, locusts, and some green worms which cause disgust just to name them. If a head of cattle dies and putrefaction has begun, the Chiriguano finds it excellent; give it to him and it is a grand gift, and that day is a carnival for him; he does not try to find out whether the animal died from the poison of a viper or rattlesnake or from rabies (1).

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252 1. When Indians bring home the meat of dead cattle well into a state of putrefaction, they boil it in ollas and throw away the liquid, and in this way it loses much of its bad smell.

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178 I do not know whether it is through superstition or because they are descendants of the Jews that this tribe formerly did not eat the flesh of the pig; although they like and hunt the wild boar or the peccary, they did not touch the domestic pig, but today almost all of them, with the exception of some women, eat it.

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262 The Chiriguano suffers in times of hunger or scarcity of food, but he looks for food in the earth; this is very harmful food, which produces various ailments, such as consumption and dysentery. He looks for the potato of the serpentine arum, extracts it, and, making a hole, heats it, throws the potatoes [252] there, and covers it with ashes and embers, leaving them overnight; on the following day he and his family eat, but it gives [164] them a bad stomach-ache, which makes them throw themselves down with their bellies to the ground until the pain abates; the same potato, raw, is efficaceous for killing worms in the galls of animals.

[222] Another food in times of scarcity is the Caraguata; this
[252] is a kind of aloe with leaves without the oily liquid; the edible part is the roots, which have a flavor like manioca; it is considerable work to pull them out of the ground, where they are firmly attached, and the mealy substance is /253/ little enough; to eat it, it is roasted in the coals or under the ashes. When it is the time for fruits and wart threaten, the Chiriguano

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519 They spend the rest of the year in diversions, playing cards and shooting dice, hunting doves and wild animals, going fishing, or fishing where the large rivers are, organizing private drinking parties, today in one barrio, tomorrow in another, today in Mengano's house, tomorrow in Fulano's, the day after tomorrow in Sempronio's, until planting time returns once more.

The Indian concerns himself very little about his house, which sometimes is at the point of falling in on him: his house is better ventilated than a sieve, it rains more inside than out, he sleeps there almost like a toad, he sleeps on the damp ground or above it on a miserable cot, placed over the mud or the water, and his sleep is like that of the dormouse (1).

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1. This way of life in the dampness in their houses or outside of them is the cause of many skin diseases, fevers, and tumors.

Hospitality

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576 The Chiriguano is very hospitable and it would be hard to find any other race which is his equal in this: he receives and serves everyone in his house, both whites and those of familiar condition, for example, the Toba, and, with greater reason, those of his own race. They visit from one town to another, and at the first meeting or at first sight they say immediately, /266/ depending upon the age of the person most Ndenguama ze tati? good day, uncle, if it is in the morning; Ndecaaruma ze? good afternoon; or Ndepiiruma ze? good evening. Literally, these three salutations have another meaning. The first means "Have you reached this day, have you arisen healthy and vigorous?" The second, "Have you reached the afternoon?" And the third, "Have you reached the evening?" He who receives the greeting answers, Anguama, checaaruma, or chepiiruma, respectively.

4: Nimo--385 M-3 (1830-1911) 1912 SP10 Chiriguano SP10

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which rises continually to the sky on these interminable plains, taking behind it all of the trash that it finds along its way. It is called Curumino, and, according to them, it causes pain in the feet, knees, and bones. When a whirlwind begins in a town, they try to cut it with a knife.

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Diseases and Remedies

The most common illnesses among the Chiriguano are the intermittent fevers that are endemic, tuberculosis or consumption, eye disease, convulsive coughing, diarrhea, dysentery, mange or itch, and tattoos accompanied by a kind of leprosy that covers a large part of the body. The intermittent fevers appear at the time of the first rains and continue until the time of the fruits and fresh maize. These fevers are not fatal, but one who is attacked by them has a rather afflicted life. Their remedies are vegetal: they boil cuchracha or algarroba bark, and they drink this water, but it does not always have a salutary effect. /386/ If a small dose of quinine is administered during the intermittent fevers, they immediately get well (1).

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1. They get well with a small dosage, perhaps because their bodies are not accustomed to the remedies of the apothecary. Another efficacious remedy for the intermittent fevers is bitter coffee or coffee with a little sugar.

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The itch, tumors, and leprosy do not cause death. Chiriguano food is almost always saltless. They are not careful in selecting it, and stinking meat does not disgust them. Their water is not always clean; they bathe at any hour and, after bathing, do not dry their bodies. If it rains, they let the wet clothing dry on their person. From this and other causes come the many skin

/The rain./ From this and other causes come the many sick
diseases which do not let them sleep. The itch is cured with salt-
peter found in the dry stream beds. They call it Curuyuqui, or
salt for curing the itch, but the remedy does not always produce
its effect. The itch principally attacks those of few years, and
nursing infants catch it from their mothers. Lepers are cured very
efficaciously by means of hot cow dung, and it is enough to apply
it two or three times for a cure within three days without any
further remedy, but they do not resign themselves easily to using
this repugnant but efficacious remedy.

Smallpox and measles are epidemics which appear from
time to time; for this reason I do not put them in the list of endemic
diseases like the former ones. The Chiriguano runs from smallpox
as a person with hydrophobia does from water, since through ex-
perience he knows that anyone who gets it has a hard time being
saved from a horrible death. When it enters a town, it sows fear
and desolation. Sick people resign themselves to death, and the
healthy ones flee in terror to other cities. It seems that it is not
easy to attack smallpox directly, and up to now only vaccination
has benign effects (1).

1. When smallpox breaks out, the missionaries go wherever their ministry is needed, like doctors and priests. Up to now none of them has caught it, perhaps because they are vaccinated or because they have different blood.

In 1909 the town of Cuevo, which is about eight kilometers
from Tve, was decimated by smallpox. I vaccinated all the
people of Tve and those who were not residents there. But the
vaccine did not take in all of them, as occasionally happens.
Nevertheless, few got sick and only two died. The remedy that
I administered after the initial fever had begun was rather strong
wine vinegar. The sickness ran its course only in those who had
not drunk the /TET/ vinegar or who had not been able to retain it
in the stomach. I administered one cup every six hours three
times, and it was enough for this terrible illness, which would
cause so many deaths in Cuevo, to pass almost unperceived in
the San Buenaventura Mission (1).

1. Many people became sick and died in the

/287 cont./

799 164 Santa Rosa Mission, but the use of the vinegar, which I began to administer later, made the mortality stop.

Measles usually attacks children, as does diarrhea, and because they are very delicate it is difficult to treat them, for which reason almost all of them succumb. Lemon and vinegar are efficacious remedies for both illnesses; in many cases I have administered camomile with good results. Diarrhea in infants comes from a scarcity of food, for then the mothers eat very hot things, such as the fruit or potato of serpentine arum, algarrobas, and other wild plants, as a result of which the infants drink the very hot milk, which damages their bellies and produces inflammation (2).

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[757] 2. There exists near or around the lakes a herbaceous plant called pasote, and by the Indians and whites páico. A tisane made from this herb is efficacious against smallpox and measles.

Dysentery occurs in older people, and an occasional case of it shows up even in children. The cause of this illness is the very poor diet in times of want, when they eat wild roots and fruits. Here there is a very effective remedy, which the whites call meloncillo and the Indians Ñurantimburu. This is a thorny bush with long thorns, from which its name comes. At the time when it buds, or in the springtime, its thorns are slightly purple, and its roots are the remedy. They are boiled and the patient is given this water to drink for a week. The eye sickness attacks all, big and small, without distinction and is so bad that some lose their sight completely or are left with only one eye. In the missions this is treated with white lead or lead acetate, and it suffices to apply it two or three times to bring about a complete cure.

164 757 [797]

164 The convulsive cough, or whooping cough, is another illness which attacks children up to ten years old, causing many deaths. It shows up in the cold months and even in the rainy season, sometimes attacking grown-ups, among whom it does not cause death. There is in the hills a yellow flower which around here is called

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164 159 /387 cont./ viza-viza. The tisane made from these flowers has salutary effects, but it is not strong enough to bring about a radical cure, /388/ especially if the precaution of wrapping the child up after the potion is drunk is not taken (1).

1. Most effective for whooping cough is the use of petroleum. The child is anointed from his forehead to his belly and made to drink a few drops. In 1910 almost all of those whom I treated with petroleum got well.

164 Consumption, or tuberculosis, attacks men and women and appears in both sexes as a stomach-ache. This pain can be considered the beginning of the sickness, which usually appears after the age of 40, but in certain places it carries to the grave persons who have not yet reached the age of 20.

In the Santa Rosa mission this disease alone, in less than ten years, caused the death of more than 70 schoolgirls; at that time this mortality was attributed to the bad water there, but as it is found in other places where the water is excellent there must be another cause. For young people or adolescents it could not be the continual fires, because there are none in the schools.

164 159 155 The Chiriguano has no remedy for tuberculosis, and one who gets it is resigned to death, because whether or not he attributes everything to sorcery, he believes in it and in the poison in this case; hence the sick person goes for help to the sorcerer, who to get rid of the illness, without succeeding, uses atrocious and even immoral means when dealing with women (2).

[199] 2. The missionary buys remedies from the apothecary to treat the Indians. These remedies are almost always repugnant. If the sick person does not drink it in the presence of the missionary, he will pour it out; he has more faith in the sorcerer.

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Other Illnesses and Remedies

759 According to the illnesses that exist, there are doctors and medicines among the Chiriguano. The former have not gone through any university other than experience, learning from the latter to prepare medicines, not only from plants and herbs, but also from minerals and even from the excrement of animals. The doctors receive the praise of individuals who know less than they and are differentiated even by name from the evil sorcerers, who are called Mbaecué, while the former are called Iyaye, and the medicines or drugs are called Mbo.

759 The oil that is necessarily a side product of the preparation of chicha is very good for curing headaches. Salt, ground and mixed with the urine of infants, is drunk and is a good anodyne for stomach-aches. Dampness and cold produce a tightening of the nerves, which causes atrocious pain in more /759/ than one person. To cure this disorder they pull up a branch of viale /a cactus/, Navacaflina, strip off the spines, parch it, and, when it is good and hot, apply it to the affected parts and get well. They use something else to cure dysentery. They burn yellow maize, grind it with watermelon seed, and have those attacked by the disease drink it (1).

1. The melancillo /little melon/ is a remedy which the whites told me about. It is more effective, but the Chiriguano have no faith in it or do not use it out of weakness.

When a sick person suffers a pain in his side, he asks for a hairy-armadillo shell, grinds it up, and drinks it. At the same time what is left is heated at the fire and applied to the pain, and it stops as if by magic. If measles comes out on the lips, the sorcerer or doctor applies a tick which has been taken off some dog's flesh, and then it disappears. Sometimes tumors or a swelling in the throat and in the knees appear, and these are made to disappear through the application of the herb called Urucuna. It is heated at the fire in a small olla and applied. Another herb, called Yandurimbó, is also good for this. They

• [14]

/157 cont./ One old woman who was supposed to know Chané very well said she would teach me after she had reached the realm of the dead. Since the Indians in this happy place are not bothered by whites, and not by ethnographers either, the promise of the old woman was not very friendly. Ca 124 127 123 Ca

The Chané use their old language for many expressions that are abusive, for example, kaxrimóbyti, which they translate as son of a w---e. An invitation to coitus is called pexíne. There are also songs in their /158/ old language, for example, tiparakinkoyé, tiparakinkoyé, tiparakinkoyé, tendya, tendya, tendya, which they did not know how to translate. 195 197 Ca [533] C

From the Río Parapití I again visited the Chirigueno chief Tarairi in the Caipipendi valley, where I sought to buy as many old ornaments and other valuables as possible. Besides Tarairi I also visited another chief, Tumbey, an old worthy who was always embracing me and saying "I am Tumbey." /Fig. 77 appears here./ "Yes, the great, mighty Tumbey," I chimed in, which made the poor reduced fellow feel very flattered. 84 126 C [123]

From the Caipipendi valley I went by way of Pipi to the mission at Ivo. This lies in an arid, lonely region with little water, near several huge mountains, and the life there must be dreadful. When smallpox was very prevalent in the region, Father Bernardino successfully prevented the disease from spreading into the mission by vaccinating all the Indians living at the place. Father Bernardino is a truly unselfish human being, a genuine missionary. As a result of the vaccination, no one in Ivo died of smallpox, whereas the sinister disease raged frightfully among the whites a few miles from the station. It almost served them right. If anyone died of smallpox, the corpse was laid on a table decorated with paper flowers and a crucifix. Around this the other Indians would get drunk and /159/ continue to drink obligos (1) until they were finally lying on the table. C 127 164 116 133 B12 C [541] C [273]

1. If a person drinks obligo with another, the latter must drink up. C [576]

/159 cont./
in the village of Cuevo alone 60 out of 200 persons died within a short time. I visited the 140. They were as gay as ever. Spirits and beer were consumed in quantities.

Father Bernardino was never given credit for this work, but rather the medicine men, who had bewitched the sickness so that it would not come to Ivu. The white colonists, too, occasionally had the medicine men come in order to /Fig. 78 appears here/ drive away the sickness. They did not believe in the vaccine either.

With Ivu as the starting point, I made a trip into the

Fig. 77. Clay vessel made by the wife of the Chiriguano chief Maringay. 1/6.

Igüembe valley, in order to visit the Chiriguano chief Maringay. It was a charming ride on horseback up on the high crests and down into deep valleys, through an often grandiose, colorful landscape. These valleys are poor in forests. Only in a well-protected ravine in which a brook trickles forth is the vegetation luxuriant.

I soon became very good friends with old Maringay. The old man was conservative, clung to the old customs, and felt that the Indians should be on good terms with the whites, but should preserve their old habits and customs unchanged. His village was extraordinarily interesting and very rich in old, fine things.

/215 cont./

President Belzu in Sucre. The latter governed between 1848-1855; thus, 100-year-old Maringay is obviously not more than about 80. An 80-year-old Indian is therefore the oldest of his tribe. Among the Indians one almost always sees /Fig. 112 appears here/ that the one who has grown-up grandchildren is very frail and senile and stands at the brink of the grave. Indian men and women mature very rapidly, but also age quickly. At 50 the Indian is an old man, at 70 a so-called centenarian. Im Thurn (1) likewise

1. Im Thurn, op. cit., p. 190.

believes that the Indians do not grow old. /216/ He thinks that they seldom reach an age older than 40 or 50.

Maringay's hair was slightly gray. There are some Indian men and women whose hair is almost whitish yellow, but they are rare (Fig. 112). I never saw a bald Indian. When they are older, their faces are deeply furrowed. Not infrequently they become blind in old age, less often deaf.

Among the Choroti and Ashluslay the appearance of old people is often frightening; they are dirty, emaciated, and bleary-eyed. This is not the case among the Chané and Chiriguano. These Indians know how to grow old in beauty, and even the old people keep themselves nice and clean.

If the Chané or Chiriguano Indian becomes seriously ill, the medicine man is sent for, as among other Indians.

The Chiriguano and Chané distinguish between two kinds of medicine men, whom they call "ipáye" or "ipáyepótchi." The former are good and lift the spell; the latter are able to lift the spell and to bewitch.

I once jokingly asked a Chiriguano whether Father Bernardino in Ivu was an "ipáye" or an "ipáyepótchi." The Indian answered dutifully, an "ipáye." The position of the missionary among the Indians is that of medicine man; he assumes their power and their influence.

In the preceding I said that the whites in the vicinity of Ivu sent for an Indian medicine man to drive away smallpox.